

Application Serial No. 10/681,267
Amendment and Response B
Attorney Docket No. 14116US01

REMARKS

Applicants thank the Examiner for rejoining the claims based on traversal of the June 25, 2005, restriction requirement. Below, Applicants address all of the points raised in the September 20, 2005, Non-Final Office Action ("the Office Action").

Claims 1-21 are pending. Claims 4-6, 8, 10-11, and 17 have been amended to correct typographic omissions. Please amend the claims of the present application as set forth above. Applicants have not changed the scope of the claims.

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) in view of U.S. Patent No. 6,314,986 B1 to Zheng ("Zheng") in combination with U.S. Patent Publication 2004/0050326 by Thilderkvist *et al.* ("Thilderkvist"). (Thilderkvist, published on March 18, 2004, is the publication of U.S. Patent Application No. 10/243,426, which was filed on September 12, 2002, and now appears abandoned for failure to respond according to a PAIR Status Report reviewed on February 21, 2006.)

Applicants respectfully submit that claims 1-21 define patentable, non-obvious subject matter. Applicants respectfully traverse the rejection, for at least the reasons set forth below.

I. The Proposed Combination Of Zheng and Thilderkvist Does Not Render The Pending Claims Of The Present Application Unpatentable Under 35 U.S.C. §103(a)

Applicants respectfully submit that no *prima* case of obviousness has been made in view of the Zheng and Thilderkvist references. The Office Action does not meet at least two of three criteria for basing a finding of obviousness upon a combination of references. For a *prima facie* case of obviousness, the MANUAL OF PATENT EXAMINING PROCEDURE ("MPEP") establishes three criteria:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

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Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure."

MPEP § 2143 (citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Applicants submit that the Office Action neither: (A) identifies in the prior art a motivation or suggestion to combine the references, nor (B) explains how the cited references teach or suggest all of the claim limitations.

A. There Has Been No Identification Of Any Motivation Or Suggestion In The Prior Art To Combine The References

The Office Action states, in part, the following:

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Zheng et al. device to have a fluid flow restrictor in view of the teaching of the Thilderkvist et al. reference in order to [sic] a desired flow restriction within the line.

(Office Action at 3.) But that statement is an insufficient basis for the rejection of record, because Federal Circuit case law and the MPEP require that the "teaching or suggestion to make the claimed combination and the reasonable expectation of success must **both be found in the prior art, not applicant's disclosure.**" MPEP at § 2143 (citing In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added)). Indeed, the Federal Circuit "makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999).

The Office Action does not identify any motivation or suggestion in the prior art that would lead one having ordinary skill in the art to combine Zheng with Thilderkvist. As acknowledged in the Office Action, Zheng does not disclose a fluid control and delivery

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assembly "having a fluid flow restrictor other than element 884." (Office Action at 2.) In an effort to address that shortcoming, the Office Action goes on to note that:

[t]he Thilderkvist et al. reference discloses another fluid control and gas delivery assembly having a fixed "fluid flow restrictor" (e.g. a manually adjustable needle) in line to achieve a desired flow restriction.

(Id. at 2-3 (citation omitted).) Thilderkvist's discussion of the flow restrictor, however, is in the context of structuring the "gas delivery system 100 such that second outlet 166 is more restrictive to gas flow than first outlet 164 when first metering valve 178 is adjusted to a maximum flow capacity and second outlet 166 is less restrict than the first metering valve 178 is adjusted to a minimum flow capacity." (Thilderkvist, ¶ 0113; see also ¶ 0110.) Thus, there is no objective basis in the cited references for the combination; that is, the motivation for such a combination can only be ascertained from Applicants' disclosure. See In re Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002) (explaining that the "examiner can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teaching reference.'") No reasonable expectation of success has been shown either.

Thus, for at least these reasons, Applicants respectfully submit that claims 1-21 define patentable subject matter.

B. The Proposed Combination Of Zheng and Thilderkvist Does Not Teach Or Suggest All Claim Limitations

The proposed combination of Zheng and Thilderkvist also falls short, because it does not teach or suggest, expressly or inherently, all of the elements of the pending claims. That is, none of the cited references identifies or suggests, or even hints, that a fluid control and gas delivery assembly having a fluid flow restrictor positioned and configured as described and claimed in the present application. For example, the fluid flow restrictor specified by the pending claims is (1) positioned in the gas dispensing path

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downstream of the pressure reducer and (2) configured (a) to restrict the flow of the fluid delivered to the fluid flow restrictor at the delivery pressure to a maximum mass flow rate that is equal to or less than the allowable mass flow rate standard for the hazardous fluid (see, e.g., claim 1), or (b) to limit the flow of gas delivered to the fluid flow restrictor at the delivery pressure to a mass flow rate that exceeds a maximum allowable flow rate standard at the first pressure for the fluid (see, e.g., claim 2). Thus, Applicants respectfully submit the present claims define allowable subject matter.

CONCLUSION

In view of the arguments set forth above, Applicants submit that the claims are allowable. Applicants therefore request that the Examiner reconsider and withdraw the rejection of record, and allow all of the pending claims as currently presented.

If the Examiner has any questions or Applicants can be of any assistance, the Examiner is invited to contact one of the undersigned attorneys of record.

Though no fee is believed to be due in connection with this Amendment and Response (other than those separately paid in connection with the extension fees), the Commissioner is hereby authorized to charge any additional fees that are presently required, or credit any overpayment, to **Deposit Account No. 13-0017**.

Respectfully submitted,


McANDREWS, HELD & MALLOY, LTD.

Wil Rao
Reg. No. 52,151
An Attorney for Applicants

Herbert D. Hart III
Reg. No. 30,063
500 West Madison Street
Chicago, Illinois 60661
Telephone: (312) 775-8000
Facsimile: (312) 775-8100